

20010518.qrp v02_n193.qrl.20010518

Date: Fri, 18 May 2001 19:03:06 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2193

QRP-L Digest 2193

Topics covered in this issue include:

- 1) [98391] Re: UPS Service, was mouser redux...
by Chris J Cole <cjcole@qwest.net>
- 2) [98392] Re: QRP for seniors
by "Mike Yetsko" <myetsko@insydesw.com>
- 3) [98393] RE: NorCal Torrid Kits:
by Mike Gipe <mgipe@reliablemeters.com>
- 4) [98394] SA602s
by "Ed Tanton" <n4xy@att.net>
- 5) [98395] Something in the translation...
by "Edward Garnett" <ed@brigalowit.com.au>
- 6) [98396] MH101: VFO Finished
by John Wagner <john@neknetwork.com>
- 7) [98397] Re: MH101: VFO Finished
by "Karl F. Larsen" <k5di@zianet.com>
- 8) [98398] seniors/intervention
by crc@io.com
- 9) [98399] Re: MH101: VFO Finished
by "Don Wilhelm" <w3fpr@arrl.net>
- 10) [98400] Re: NorCal Torrid Kits:
by John Sullivan <kg0mz@swbell.net>
- 11) [98401] Re: Improved 2N2222A?
by "Steve McDonald" <jsm@gulfislands.com>
- 12) [98402] Halogen Light Noise
by "Steve McDonald" <jsm@gulfislands.com>
- 13) [98403] Re: MH101: VFO Finished
by John Wagner <john@neknetwork.com>
- 14) [98404] Another PSK31 question
by "Fred DeVries" <fred.devries@mindspring.com>
- 15) [98405] Help!! troubleshooting an locked electronic keyer
by "Donny Sirait" <dsirait@centrin.net.id>
- 16) [98406] Thoughts on a Double Balanced Tayloe Detector
by Dan Tayloe <dtayloe@home.com>
- 17) [98407] Re: LinPSK
by Bob Nielsen <nielsen@oz.net>
- 18) [98408] Re: LinPSK
by Joe Reed <joe@n9jr.dyndns.org>
- 19) [98409] RE: NorCal Torrid Kits:

- by "John L. Sielke" <w2agn@pobox.com>
- 20) [98410] [CONTEST] QRP Contest Calendar 5/18-5/31
by Ken Newman <N2CQ@citnet.com>
- 21) [98411] Re: QRP for seniors
by "Tom Pennebaker" <n4rs@netpath-rc.net>
- 22) [98412] Re: Improved 2N2222A?
by Chuck Ludinsky <cjl@mitre.org>
- 23) [98413] RE: Halogen Light Noise
by "Kevin Muenzler, WB5RUE" <wb5rue@arrl.net>
- 24) [98414] Re: NorCal Torrid Kits:
by Phil Wheeler <w7ox@earthlink.net>
- 25) [98415] NorCal Torrid Kits:
by Bcieslak@ra.rockwell.com
- 26) [98416] FDIM 2001 Seminar
by "James P. Osburn, P.E." <j.p.osburn@ieee.org>
- 27) [98417] SSB RAGCHEW
by "Ronald A Pfeiffer" <Ronald_A_Pfeiffer@raytheon.com>
- 28) [98418] Re: SSB RAGCHEW
by Bruce Muscolino <w6toy@erols.com>
- 29) [98419] Re: Help!! troubleshooting an locked electronic keyer
by "Lau, Zack, W1VT" <zlau@arrl.org>
- 30) [98420] VFO
by "Donald Philbin" <donaldphilbin@hotmail.com>
- 31) [98421] Reminder: Appalachian Trail Hike in PA this weekend.
by "Ron Polityka" <wb3aal@fast.net>
- 32) [98422] NH AT Alert
by "Steven Weber" <kd1jv@moose.ncia.net>
- 33) [98423] Re: Help!! troubleshooting an locked electronic keyer
by "Steven Weber" <kd1jv@moose.ncia.net>
- 34) [98424] Re: Help!! troubleshooting an locked electronic keyer
by "Dave Fifield" <ad6a@earthlink.net>
- 35) [98425] Re: Help!! troubleshooting an locked electronic keyer
by "Tony Fishpool" <tony@g4wif.fsnet.co.uk>
- 36) [98426] RE: Halogen Light Noise
by Curt Milton <wb8yyy@yahoo.com>
- 37) [98427] Schematic diagram re: Locked electronic keyer
by "Donny Sirait" <dsirait@centrin.net.id>
- 38) [98428] Re: new Kenwood radio?
by Curt Milton <wb8yyy@yahoo.com>
- 39) [98429] Re: Improved 2N2222A?
by "Mike Yetsko" <myetsko@insydesw.com>
- 40) [98430] W8PIG to activate the original TT2 from FDIM
by pwomble1@tampabay.rr.com
- 41) [98431] Re: new Kenwood radio?
by "Jerry McCollom" <w0mc@hotmail.com>
- 42) [98432] [MH101] VFO and rig layout
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>
- 43) [98433] B&W GDO coils

by "Ed Tanton" <n4xy@att.net>
44) [98434] RE: Help!! troubleshooting an locked electronic keyer
by Nick Kennedy <nkennedy@tcainternet.com>
45) [98435] Re: Wanted: Hy-Gain 3806 Battery Tray
by wb2vuo@juno.com

Date: Thu, 17 May 2001 17:24:09 -0500
From: Chris J Cole <cjcole@qwest.net>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [98391] Re: UPS Service, was mouser redux...
Message-ID: <B729B9B9.2C07%cjcole@qwest.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

QRP-L Gang--

Maybe I live in a nice town or maybe I'm strange but I find UPS service where I live better than Fed-Ex or USPS on items other than computers. My UPS man is very friendly and always comments on something like the antennas or the like. He has been here for about 10 years now so he has seen lots of packages come to our home. He will leave packages right where we tell them and if it is big and we are not home he'll slip it inside our door for us.

Our Fed-Ex man seems to complain a lot, most of the time we are not home and he grumbles about having to return to our house, when we finally signed that wavier saying they could leave stuff without a signature, they leave in our garage next to other boxes so it blends in nicely and never leave a note. In fact we spent a good week looking for a package the Fed-Ex people left only to find it in another spot other than the one we had told them to put it in! He also told us to never buy airline tickets and have them sent through them as he does not like to be responsible for them. I do use Fed-Ex for computers because I like to make sure they get to my house and it is something you have to sign for anyways

As for USPS well, I've seen some of my packages beaten up pretty good. USPS is okay for some things.

In short I just think it depends on where you live, I know if we get a sub for UPS he tends to not do things right.

Just my 2 cents
73s
Chris K0CNN

Date: Thu, 17 May 2001 19:04:09 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <g4wif@btinternet.com>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>
Subject: [98392] Re: QRP for seniors
Message-ID: <008b01c0df25\$dabedf60\$0600a8c0@dad>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I got it too, both ways.

First temptation was to flame the guy.

Second was to go to all the kinky sex forums on Yahoo and open an account,
then change the email director to him.

Hey... JUST KIDDING!!!

But you're right. It didn't belong here. Not at all...

Mike

> Somehow I also managed to get a copy of that direct. Did anyone else?
> Not only is it off topic for a QRP list, but to spam a UK ham with
> american political stuff earns an immediate brand new filter. We have an
> election going on over here and it would be no more appropriate for me
> to post my political opinions on this forum.
> Given that this had no radio connection at all I think the "Terres
> Family"
> owe this list an apology.
>
> Tony - G4WIF
>

Date: Thu, 17 May 2001 16:37:20 -0700
From: Mike Gipe <mgipe@reliablemeters.com>
To: Gene Sailsbury <gsailsbury@mobill1.net>, "QRP-L list (E-mail)" <qrp-
l@Lehigh.edu>
Subject: [98393] RE: NorCal Torrid Kits:
Message-ID: <F988E2FF74F4D111A61F00A0C949D7A964B5DB@mission>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Gene --

My apologies if you interpreted this as a flame. It was certainly not intended as such. It was intended as an innocent and humorous rejoinder to break up the tedium of the work day. (Or perhaps your message is the rejoinder? Can we get a ruling from the attorneys present?)

Your spelling error is a common one here on QRP-L, and it never fails to strike me as funny whenever I see it.

Again, please accept my apology if you felt that I was criticizing you, for I did not intend to.

Mike K1MG

> -----Original Message-----
> From: Gene Sailsbury [mailto:gsailsbury@mobill1.net]
>
> Sorry for the spelling. I did not think that I would get
> flamed on the
> group for a spelling error but it happen.
> Gene
>
> > Perhaps you ordered the wrong kit?
> >
> >
> > torrid: giving off intense heat; passionate
> >
> > toroid: a body in the shape of a torus; a form with a
> closed magnetic
> path
>
> > > Still no kits received in Kansas yet. Sure need them.
> > > Gene Sailsbury KC0IKY

Date: Thu, 17 May 2001 19:56:42 -0400
From: "Ed Tanton" <n4xy@att.net>
To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>
Subject: [98394] SA602s
Message-ID: <CKEGICNFDIMCEKEDCEHFMEHAHCAA.n4xy@att.net>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dieter Gentzow, W8DIZ, at <http://kitsandparts.com/specials.html> has SA602s at 5 for \$10.00-in case any of you folks are looking for some. I think that's a good price thses days.

73 Ed Tanton N4XY <n4xy@arrl.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

R-390: Motorola SN: 374;
R-390-A: Capehart SN: 2241
51S-1 WE SN: 4389
HRO-50; HRO-60; & HRO-500
SP600-VLF SP600-JX-17 SP-600-JX-21

Date: Fri, 18 May 2001 10:39:45 +1000
From: "Edward Garnett" <ed@brigalowit.com.au>
To: <qrp-l@lehigh.edu>
Subject: [98395] Something in the translation...
Message-ID: <000301c0df33\$09cf2370\$6400000a@de11>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Nils,

I particularly liked the 'Full Frequency Band Radio Transceiver Fish Boat'..... bless their cotton socks.

73 Ted

<Date: Thu, 17 May 2001 09:51:08 -0400

<From: Nils R Young <nilsbull@juno.com>
<To: QRP-L@lehigh.edu
<Subject: [98343] More intervention NOW please?
<Message-ID: <20010517.095112.-473525.0.nilsbull@juno.com>
<MIME-Version: 1.0
<Content-Type: text/plain
<Content-Transfer-Encoding: 7bit

<Samideanoj!

<

<Just in time to have \$40 to hand Bill Kelsey for the FOXX3 kit tomorrow,
<I went looking for "QRP" "transceiver and ended up, after looking at a
<lot of neat ideas from non-gringo places, at this URL:
<<http://www.fenghuoradio.com/>
<

Date: Thu, 17 May 2001 21:15:38 -0400
From: John Wagner <john@neknetwork.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [98396] MH101: VFO Finished
Message-ID: <3B0477BA.9D186031@neknetwork.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Mouser came through with the caps I ordered monday and I finished the
VFO of the MH101 SW30+ this evening.

Updated the web page at: <http://www.qsl.net/kb1ens/sw30/sw30mh.html>
(finished VFO is near the bottom).

This is a lot of fun (I know, I keep saying that, but it is!). I'm sort
of wanting to jump ahead, but will wait and see what Chuck has us doing
next. I'm a little surprised how the VFO ended up laying out "manhattan
style" - it's sort of upside down from what I pictured it. Having said
that, I don't want to jump ahead and make a major mistake!

What I think I'll do is layout some stuff on paper and see how close I
come to what Chuck does.

73,

John, KB1ENS

--

John Wagner - john@neknetwork.com

Web page: <http://www.neknetwork.com>

Date: Thu, 17 May 2001 19:58:00 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: John Wagner <john@neknetwork.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [98397] Re: MH101: VFO Finished
Message-ID: <Pine.LNX.4.33.0105171955310.1103-100000@cannac.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi John, fire it up and with another receiver see if it's making a signal and if so, how stable. My TS-50 for example is stable to 16 parts per hour so with it you can get your stability measured well. That's fun!

On Thu, 17 May 2001, John Wagner wrote:

> Mouser came through with the caps I ordered monday and I finished the
> VFO of the MH101 SW30+ this evening.
>
> Updated the web page at: <http://www.qsl.net/kb1ens/sw30/sw30mh.html>
> (finished VFO is near the bottom).
>
> This is a lot of fun (I know, I keep saying that, but it is!). I'm sort
> of wanting to jump ahead, but will wait and see what Chuck has us doing
> next. I'm a little surprised how the VFO ended up laying out "manhattan
> style" - it's sort of upside down from what I pictured it. Having said
> that, I don't want to jump ahead and make a major mistake!
>
> What I think I'll do is layout some stuff on paper and see how close I
> come to what Chuck does.
>
> 73,
>
> John, KB1ENS
>

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 17 May 2001 21:24:20 -0500
From: crc@io.com
To: qRP-l@Lehigh.edu
Subject: [98398] seniors/intervention
Message-ID: <3B044184.18503.3D8270@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

These do not belong on this reflector. Please take any and all of
your political problems to more appropriate sites. This site is for
Amateur Radio discussions.

Charles Crouchet
W5KRF

Date: Thu, 17 May 2001 22:39:00 -0400
From: "Don Wilhelm" <w3fpr@arrl.net>
To: <john@neknetwork.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98399] Re: MH101: VFO Finished
Message-ID: <002e01c0df43\$beba420\$2a9e0404@dbw11main>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,
Yes, I too thought it seemed upside down from the schematic.
In fact, the whole board partitioning seems to be flipped to me, because it
is 'upside down' from the way the schematic is drawn - schematic has
receiver section at the top, but Chuck's layout has the transmit portion at
the top.

I guess it doesn't make much difference, and should work either way. Is
this a matter of perception and choice, or is there a more subtle reason?
Maybe Chuck builds with mirrors (and smoke coming from the solder too!)<g>
Inquiring minds want to know.

73,

Don Wilhelm -Chapel Hill, NC W3FPR home page: <http://www.qsl.net/w3fpr/>
QRP-L # 485 K2 SN 0020 mailto: w3fpr@arrl.net

----- Original Message -----

From: "John Wagner" <john@neknetwork.com>
> next. I'm a little surprised how the VFO ended up laying out "manhattan
> style" - it's sort of upside down from what I pictured it. Having said
> that, I don't want to jump ahead and make a major mistake!

>

Date: Thu, 17 May 2001 20:02:05 -0500
From: John Sullivan <kg0mz@swbell.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [98400] Re: NorCal Torrid Kits:
Message-ID: <3B04748D.DE86A81E@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

> > > > Still no kits received in Kansas yet. Sure need them.

Well, I know of one toroid kit that landed in Kansas last week.

72 de kg0mz

Date: Thu, 17 May 2001 19:51:46 -0700
From: "Steve McDonald" <jsm@gulfislands.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [98401] Re: Improved 2N2222A?
Message-ID: <00dc01c0df45\$7aca7540\$3712f4cc@jms>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks to all who offered help. I now have a number of avenues to explore.
The transmitter will be used as a QRSS beacon and as such, the duty cycle is
very high...ie. lots of key-down time.

Steve / VE7SL

Suggestions:

2N3053
2N3553 (several recommended this)
2N2219A
2N2218A
4 x 2N2222

Thanks again.

Date: Thu, 17 May 2001 19:57:16 -0700
From: "Steve McDonald" <jsm@gulfislands.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [98402] Halogen Light Noise
Message-ID: <00ee01c0df46\$3f489500\$3712f4cc@jms>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Has anyone experienced these monsters? My good neighbour has just put three of these miniature tracklights in his bathroom. It looks like they use a switching supply to develop 12 V as each light has its own 'module'. They are very noisy and generate all sorts of buzz and spurious signals especially in the LF band below 500 KHz. My question is...does anyone know if the 120 volt halogens (no power modules needed) are electrically silent (like a regular bulb). If that is the case I could replace the track for him and put in the quiet ones.

Steve / VE7SL

Date: Thu, 17 May 2001 23:24:36 -0400
From: John Wagner <john@neknetwork.com>
To: w3fpr@arrl.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [98403] Re: MH101: VFO Finished
Message-ID: <3B0495F4.11286AE@neknetwork.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

As I toyed with the layout on paper tonight, I came up against a few tight spots that would require wiring to link things together. However I'm pretty sure there are better ways to do it -- I'm going to continue on laying it out on paper just to learn by trial and error, but I am MOST DEFINITELY waiting to see what Chuck does before committing anything to super glue and solder!!!

I have to say; I really feel like I know this radio more than any other kit I've ever built. Stuffing and soldering a pre-packaged kit is fun, but this method of building really forces you to get intimate with what you're assembling.

73,

John, KB1ENS

Don Wilhelm wrote:

>
> Gang,
> Yes, I too thought it seemed upside down from the schematic.
> In fact, the whole board partitioning seems to be flipped to me, because it
> is 'upside down' from the way the schematic is drawn - schematic has
> receiver section at the top, but Chuck's layout has the transmit portion at
> the top.
> I guess it doesn't make much difference, and should work either way. Is
> this a matter of perception and choice, or is there a more subtle reason?
> Maybe Chuck builds with mirrors (and smoke coming from the solder too!)<g>
> Inquiring minds want to know.
> 73,
> Don Wilhelm -Chapel Hill, NC W3FPR home page: <http://www.qsl.net/w3fpr/>
> QRP-L # 485 K2 SN 0020 [mailto: w3fpr@arrl.net](mailto:w3fpr@arrl.net)
>
> ----- Original Message -----
> From: "John Wagner" <john@neknetwork.com>
> > next. I'm a little surprised how the VFO ended up laying out "manhattan
> > style" - it's sort of upside down from what I pictured it. Having said
> > that, I don't want to jump ahead and make a major mistake!
> >

--

John Wagner - john@neknetwork.com
Web page: <http://www.neknetwork.com>

Date: Thu, 17 May 2001 23:46:28 -0400
From: "Fred DeVries" <fred.devries@mindspring.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98404] Another PSK31 question
Message-ID: <001b01c0df4d\$1f6bacc0\$60d4313f@fred>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

(Listmembers, this is the third time I have tried to send this email to the list. If they all show up in your box, please accept my apology.)

This is probably a silly question, but I have not seen the answer: Does PSK31 require a SSB rig? Give the "list" a break and answer privately. Thanks.

73,
Fred DeVries KC8MMS

Date: Fri, 18 May 2001 11:58:44 +0700
From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98405] Help!! troubleshooting an locked electronic keyer
Message-ID: <005e01c0df57\$3f67f420\$c8ee92ca@donnysirait>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dear Friends,

I know that most of you guys were at Dayton at this time and probably miss this posting, however any help will be very much appreciated.

I am trying to improve my sending speed by migrating from my trusty hand key to a homebrewed electronic keyer + paddle. The keyer was made from The AD7Iambic Cheap keyer on June 88 QST. It is a 4 IC (2 X CD4017, CD4093 and CD 4070) along with 7 1N4148, 2 pcs of 3906 and 3904. The reason for me to use this approach and not the newer PIC approach is merely cost, the cost to build that keyer is less than half of the cheapest PIC keyer hi hi.

My problem:

After making a PCB from the available template and soldering the components (I use IC sockets) the keyer seems to it's job very well at least for 2 months.

But lately I got into a problem the keyer starts to act strangely, I pinpoint it to the CD4093 which act as the clock generator and also as a sidetone generator.

The keyer will lock and key's forever. When I replaced the CD4093 it works well

but now for not so long (less then 1 hour) it was again locked. I have lost at least

4 CD4093s and could not find other default components (I power the keyer from my radio's 13,8V power supply but then regulate the voltage with a 7809 as the voltage needed by the keyers circuit).

I am a bit frusturated and planning to build another duplicate (I have 1 more PCB)

but would like to know what is happening and how could I avoid this problem the next time.

I really like this keyer since it is simple (not as simple as the PIC though), cheap

and it has a potentionmeter for adjusting the speed on the fly. I can also tailor the speaker tone for of the air practice.

Please anybody can help me??

Thank you for reading and your comments.

vy 73 de YB1BOD
Donny Sirait

PS. The article mentioned about static but I don't think it was the problem here in this humid tropical climate.

Date: Thu, 17 May 2001 22:19:51 -0700
From: Dan Tayloe <dtayloe@home.com>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [98406] Thoughts on a Double Balanced Tayloe Detector
Message-ID: <3B04B0F7.EB180B59@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have been thinking about the comments posted here a week or two ago about the Tayloe detector. It appears that this detector may be more sensitive to L0 induced noise than other detectors that are doubly balanced.

The Tayloe detector is interesting in that it is a very simple way to get four phase audio, which allows DC receivers to have single signal reception (USB or LSB) by the use of simple audio phasing networks. It

is also interesting in that it has under 1 db of conversion loss, 3 db better than the best case theoretical 3.9 db loss (6 db typically) of other switching mixers.

In short, the Tayloe detector produces four phase audio from an incoming RF signal by switching and averaging 1/4 rf cycle of the input RF signal to one of four detection capacitors. The detector repetitively switches the input RF to one of the four detection capacitors at a rate of four times the desired detection frequency.

The above detector operation has two weaknesses. One is that the 4x switching clock can capacitively couple out to the antenna, which is not that bad since it was measured at 50-70 db down, but more objectionable is that it can couple back into the detector itself.

Consider a noise burst from a noisy VFO (a DDS for example) when the detector is averaging an input RF signal on the 0 degree output detection capacitor. That VFO noise burst can slightly corrupt the detected RF signal accumulating on the 0 degree output. When the detector gets to the 180 degree output detection capacitor, 1/2 RF cycle later, our noisy VFO will have a different noise burst that gets averaged on that capacitor. Using an op-amp to differently sum the 0 and 180 degree outputs, the VFO noise components will not cancel because the noise from these outputs were sampled from two different periods of time and are not the same. Worse they will add in an RMS fashion.

Bummer.....

Fortunately, it is relatively simple to turn a Tayloe detector into a double balanced Tayloe Detector.

First we need two 1:4 analog multiplexer channels. This is easy, since the 74CBTLV3253 part that is used for this purpose (TI microprocessor high speed memory bus switch part) is a ****dual**** 4:1 analog multiplexer.

Secondly, we need to feed the inputs to the two Tayloe detectors 180 degrees out of phase. This can be accomplished with 3 winding, 4:1 RF step up transformer, 50 ohms in, and center tapped 200 ohms out. The center tap on the secondary is RF and audio bypassed, and used to feed the detector bias to the two detectors.

Now imagine two detector clocking in lock step, both with RF input signals 180 degrees apart, feeding two sets of four detector capacitors. When detector "A" is sending a 1/4 rf cycle to its 0 degree detector output, detector "B" is also sending a 1/4 rf cycle to its 0 degree detector output.

This is where it gets tricky....

Because the rf into detector "B" is 180 degrees out of phase with the rf feed to detector "A", detector "B" can reuse the 180 degree detection capacitor of detector "A" and while "A" is connected to the 0 degree detection capacitor. In other words while "A" sequences through 0, 90, 180, 270, 0.... "B" (since it is 180 degrees out of phase with "A") connects to 180, 270, 0, 90, 180.... Two of the common set of four detection capacitors are always sampling RF, either the 0&180 outputs or the 90&270 degree outputs.

Only four detection capacitors are needed, just like before, but they are being feed RF two at a time instead of one at a time in the single ended case.

Now consider our noisy VFO. Since two outputs are always being feed at the same time (0&180 or 90&270), if the VFO puts out a noise burst, either 0&180 or 90&270 will both see the same noise burst at the same time (i.e.: the noise is the same and ****in phase**** on the two outputs). When differentially combined with an op-amp (either 0&180 or 90&270), the VFO noise burst should cancel out, rather than add in an RMS manner.

Likewise any VFO signal that leaks out to input side of the two detectors will be in phase (since both detectors use the same switching clock) as they head towards the antenna, and thus will cancel each other out at the differential RF 4:1 input transformer the feeds the two detectors.

.....I guess that is the whole point of a doubly balanced mixer.

Anyway, the long and short of it all, is that the only extra part needed to make a normal Tayloe detector into a doubly balanced Tayloe detector is the 4:1 input transformer since a dual 4:1 mux is used anyway. It still has 0.9 db of conversion loss, but is now less sensitive to a noisy VFO. If you have a clean VFO to start with, the difference should not be noticeable.

I am not web page literate yet or I would put up the schematic I have come up with. I have Cox at Home cable service, and am sure I have web page privileges somewhere, but I have yet to figure that out.

Forgive me for this rambling, but somebody might find this interesting.

- Dan Tayloe, N7VE; Phoenix, Az; Az ScQRPions

Date: Thu, 17 May 2001 22:47:36 -0700
From: Bob Nielsen <nielsen@oz.net>
To: qrp-1@lehigh.edu

Subject: [98407] Re: LinPSK
Message-ID: <20010517224736.C32687@oz.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Thu, May 17, 2001 at 01:48:01PM -0700, Phinizy, William wrote:
> ..where?

According to radio.linux.org.au (the best place to search for ham
software for Linux), it is available from <http://linpsk.sourceforge.net>

--
Bob Nielsen, N7XY
Bainbridge Island, WA
IOTA NA-065, USI WA-028S
nielsen@oz.net
<http://www.oz.net/~nielsen>

Date: Fri, 18 May 2001 10:52:41 +0000 (/etc/localtime)
From: Joe Reed <joe@n9jr.dyndns.org>
To: Bob Nielsen <nielsen@oz.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [98408] Re: LinPSK
Message-ID: <Pine.LNX.4.21.0105181051270.4408-1000000@n9jr.dyndns.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

You also might want to consider <http://www.freshmeat.net> as a good
starting point for Linux software.

Joe N9JR

On Thu, 17 May 2001, Bob Nielsen wrote:

> On Thu, May 17, 2001 at 01:48:01PM -0700, Phinizy, William wrote:
> > ..where?
>
> According to radio.linux.org.au (the best place to search for ham
> software for Linux), it is available from <http://linpsk.sourceforge.net>
>
>
>

Date: Fri, 18 May 2001 07:51:05 -0400 (EDT)
From: "John L. Sielke" <w2agn@pobox.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [98409] RE: NorCal Torrid Kits:
Message-ID: <XFMail.20010518075105.w2agn@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

I thought Mike used a little humor to correct what appears to be a common error.

Funny, in schools today, teachers are trained to be concerned with a child's "self-esteem" to the detriment of teaching him his ABC's, basic Math, etc. I guess then when the child grows up, he considers it a "flame" or insult, any time he is corrected.

Sad!

John W2AGN

On 17-May-2001 Gene S. wrote:
> Sorry for the spelling. I did not think that I would get
> flamed on the
> group for a spelling error but it happen.
> Gene

Date: Fri, 18 May 2001 07:54:48 -0400
From: Ken Newman <N2CQ@citnet.com>
To: epaqrp-l@lehigh.edu, QRP-L@lehigh.edu, njqrp@njqrp.org, n9avg@amsat.org
Subject: [98410] [CONTEST] QRP Contest Calendar 5/18-5/31
Message-ID: <3.0.6.32.20010518075448.0086c6b0@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

~~~~~  
QRP CONTEST CALENDAR

May 18-31, 2001

~~~~~  
Dayton Hamvention (QRP Event - FDIM)

May 18-20

Info: <http://www.hamvention.org/>
~~~~~

European Sprint (CW)

May 19 - 1500z to 1859z

Rules: <http://home.sol.no/~jana1me/htmlrules/eusprint.html>

"Work Europeans"  
~~~~~

Baltic Contest (CW/SSB) (80 Meters)

May 19 - 2100z to May 20 - 0200z

Rules: <http://home.sol.no/~jana1me/rules/baltic.txt>

"Promote Radio Sport. Work anyone"
~~~~~

AND LATER.....  
~~~~~

Anatolian RTTY WW Contest (Turkey)

May 26 - 0000z to May 27 - 2400z

Rules: <http://www.sk3bg.se/contest/anrywwc.htm>

"RTTY All Bands"
~~~~~

CQWW WPX Contest (CW) ... QRP Category

May 26 - 0000z to May 27 - 2400z

Rules: <http://ourworld.compuserve.com/homepages/n8bjq/>

"Great DX"

~~~~~  
QRP ARCI Hoot Owl Sprint (CW) ... QRP Contest!

May 27 - 2000 to 2400 (Local Time)

Rules: <http://personal.palouse.net/rfoltz/arci/hoot.htm>

"QRP Fun"

~~~~~  
Michigan QRP Memorial Day Sprint (CW) ... QRP Contest!

May 28 - 2300z to May 29 - 0300z

Rules: <http://www.qsl.net/k8dd/miqrp/rules01.htm>

"Bonus Points on HB Equipment"

~~~~~  
Please forward the contest info you sponsor to N2CQ@ARRL.NET and we will post it and give it more publicity.
Anyone may use this "QRP Contest Calendar" for your website, newsletter, e-mail list or other media as you choose.
(Include a credit to the source of this material of course.)

72 de	**** QRP Contest Calendar ****
Ken Newman - N2CQ	http://www.njqrp.org/data/contesting.html
N2CQ@ARRL.NET	http://www.n3epa.org/Pages/Contest/contest.htm
	http://www.qsl.net/cqrp/contests.html

Date: Fri, 18 May 2001 08:47:38 -0400
From: "Tom Pennebaker" <n4rs@netpath-rc.net>
To: <g4wif@btinternet.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [98411] Re: QRP for seniors
Message-ID: <003401c0df98\$b8ef7de0\$f12a1bce@pavilion>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Tony that's what the "Unsubscribe" address is for, as soon as I can find it I'm going to do just that. Apparently the list owner doesn't care. Shouldn't be here wasting my time anyway...ought to be playing cw on the radio....Tom N4RS

----- Original Message -----

From: "Tony Fishpool" <g4wif@btinternet.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, May 17, 2001 16:28 PM
Subject: Re: QRP for seniors

> Somehow I also managed to get a copy of that direct. Did anyone else?
> Not only is it off topic for a QRP list, but to spam a UK ham with
> american political stuff earns an immediate brand new filter. We have an
> election going on over here and it would be no more appropriate for me
> to post my political opinions on this forum.
> Given that this had no radio connection at all I think the "Terres
> Family"
> owe this list an apology.
>
> Tony - G4WIF
>

> ----- Original Message -----

> From: "Phil Wheeler" <w7ox@earthlink.net>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Thursday, May 17, 2001 3:41 PM
> Subject: Re: QRP for seniors
>
>

> > Obnoxiously Off Topic, whatever one's views of things Clintonesque.
> >
> > Terres Family wrote:
> > >
> > > Clinton's Mother was a nurse anesthetist and on his last day in
> > > office he
> > > made a move to let nurses give anesthesia to Medicare patients
> > > without the
> > > supervision of a doctor.
> > >
> >
>

Date: Fri, 18 May 2001 09:26:43 -0400
From: Chuck Ludinsky <cjl@mitre.org>
To: qrp-l@lehigh.edu
Subject: [98412] Re: Improved 2N2222A?
Message-ID: <3B052313.615160EC@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Really,

My (old) Texas Instrument "Transistor and Diode Data Book" gives an Ft of 250MHz for both the 2N2222 and the 2N2219. However, it does give a "free air device dissipation" of 0.8 watts for the 2N2219 vs 0.5 watts for the 2N2222 or 2N2222A (or 3 watts vs 1.8 watts for 25C case temp).

> The 2219 Ft is lower than the 2222. Might work on 3.5Mhz, thou.

>> You could look at the 2N2219.
>> I understand it is essentially the same chip, just in a metal can.
>> That means you can heat sink it, and probably drive it a bit harder.
>> 73, bob N6WG

72/ Chuck, K1CL

Date: Fri, 18 May 2001 08:33:49 -0500
From: "Kevin Muenzler, WB5RUE" <wb5rue@arrl.net>
To: <jsm@gulfislands.com>, "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [98413] RE: Halogen Light Noise
Message-ID: <000e01c0df9f\$2c6e63c0\$ef5d6f81@v8.uthscsa.edu>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yes you are correct, these new low-voltage halogen lamps are a real problems. They do use a small switching supply. The 120v models aren't too much better if they have a dimmer built-in. They use the standard method of dimming by reducing the duty cycle of the AC by squaring off the wave form. They can cause noise too but not to the extent of the low-voltage models. If your neighbor doesn't need a dimmer the 120v lamps would cause no more noise than a standard light bulb. Problem is that most tracks aren't rated for 120v operation.

72/73

Kevin, WB5RUE

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Steve McDonald

Sent: Thursday, May 17, 2001 9:57 PM

To: Low Power Amateur Radio Discussion

Subject: Halogen Light Noise

Has anyone experienced these monsters? My good neighbour has just put three of these miniature tracklights in his bathroom. It looks like they use a switching supply to develop 12 V as each light has its own 'module'. They are very noisy and generate all sorts of buzz and spurious signals especially in the LF band below 500 KHz. My question is...does anyone know if the 120 volt halogens (no power modules needed) are electrically silent (like a regular bulb). If that is the case I could replace the track for him and put in the quiet ones.

Steve / VE7SL

Date: Fri, 18 May 2001 06:33:49 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: w2agn@pobox.com, QRP List <qrp-1@lehigh.edu>
Subject: [98414] Re: NorCal Torrid Kits:
Message-ID: <3B0524BD.D3EDA249@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"John L. Sielke" wrote:

>

> I thought Mike used a little humor to correct what appears to be a common error.

>

In fact, it can be technically correct: I did have a toroid become torrid once .. too much current. Truly a "flame".

Some folks take themselves (and others) a bit too seriously, I'm afraid.

73, Phil W7OX

Date: Fri, 18 May 2001 08:47:20 -0500
From: Bcieslak@ra.rockwell.com
To: qrp-l@Lehigh.EDU
Subject: [98415] NorCal Torrid Kits:
Message-ID: <0F23EB5427.63663157-ON86256A50.004BAD41@ra.rockwell.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Got my kit over a week ago.....Now... what to build

Brian AE9K

Date: Fri, 18 May 2001 09:00:58 -0500
From: "James P. Osburn, P.E." <j.p.osburn@ieee.org>
To: "wvara@butler.indiana.net" <wvara@butler.qrp.com>
Cc: "List; QRP, QRP Mailing List" <qrp-l@lehigh.edu>
Subject: [98416] FDIM 2001 Seminar
Message-ID: <000901c0dfa3\$025ebb80\$c6e9a0ce@aaacomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yesterday I attended the FDIM 2001 QRP Seminar near the Dayton Hamfest. Here's a link to some pictures I took.

<http://www.qsl.net/wd9eyb/fdim2001/>

Jim, WD9EYB

Reply-To: j.p.osburn@ieee.org

Date: Fri, 18 May 2001 10:42:44 -0400
From: "Ronald A Pfeiffer" <Ronald_A_Pfeiffer@raytheon.com>
To: neqrp@jonal.net, qrp-l@Lehigh.EDU

Subject: [98417] SSB RAGCHEW
Message-ID: <0F2AFF5815.B29FAE1A-0N85256A50.004FFC35@and.us.ray.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Well the band had miserable noise around 7.285 so I tuned up to 7.290 where the noise went away but there were QSO's ! Tuned down to 7.245 +- 3 and more QSO's. So I called CQ on 7.285 in the middle of the noise and to my surprise Steve KD1JV from NH returns! We chatted for a few minutes and Seab AA1MY joined us. The noise became too much so we went QRO to 20Watts and that solved the noise! Sometimes you need POWER! About 8:12 John WB1HBE joined us. All chatted for a few minutes before we told John we were QRO at 20W. He then went QRO and all had a great time taking a short break from CW. At 8:25 we QSY'd to 3.565 to wait for the NEQRP CW NET to start.

It was a little rough but I will be doing this ragchew session again next week at 8:00PM half hour before the CW net.

Ron - N1ZSW

Date: Fri, 18 May 2001 10:54:13 -0400
From: Bruce Muscolino <w6toy@erols.com>
To: Ronald_A_Pfeiffer@raytheon.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [98418] Re: SSB RAGCHEW
Message-ID: <3B053795.67809BF4@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ron,

Oh gosh, 20 watts? See, there are times when there is no substitute for power. I have been checking into the Hallicrafters Collector's Net on Sunday afternoons using my mighty 10 watts on 20 meters. It works, but I would prefer to sue 100 watts at times!

73

Date: Fri, 18 May 2001 10:57:32 -0400
From: "Lau, Zack, W1VT" <zlau@arrl.org>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [98419] Re: Help!! troubleshooting an locked electronic keyer
Message-ID: <125490A005E3D3118C9C00805FC743CC016B9E67@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi Donny,

A possibility may be quick voltage spikes on the power supply which are not caught by the 7809 voltage regulator. You may need to add a 10 volt zener across the output of the regulator. You could test this by running the keyer off of batteries. The batch of 4093s may have a lower max voltage than the other parts, so they act as fuses.--Zack W1VT

Date: Fri, 18 May 2001 08:49:35 -0700
From: "Donald Philbin" <donaaldphilbin@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [98420] VFO
Message-ID: <F177A4qrc1k0HE9JFaq0000be85@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Don Wilhelm wrote:

>
>Gang,
>Yes, I too thought it seemed upside down from the schematic.
>In fact, the whole board partitioning seems to be flipped to me, because it
>is 'upside down' from the way the schematic is drawn

The VFO is built upside down so that the rig works on the "other" sideband!
:>

D.K. Philbin KD6TK

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Fri, 18 May 2001 11:59:36 -0400
From: "Ron Polityka" <wb3aal@fast.net>
To: ".HF Pack" <hfpack@yahooogroups.com>, ".G-QRP Club" <GQRP@egroups.com>, ". QRP-

L" <qrp-1@lehigh.edu>, ". QRP Solar Power" <QRPSolarPower@yahoogroups.com>,
". NJ QRP-L" <njqrp@njqrp.org>
Cc: <HamRadio_Mountaintopping@yahoogroups.com>, <elecraft@qth.net>,
<qrpp@yahoogroups.com>
Subject: [98421] Reminder: Appalachian Trail Hike in PA this weekend.
Message-ID: <002d01c0dfb3\$8bc298a0\$f5135cd1@wb3aal>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Everyone,

This weekend the PA section of the Appalachian Trail will be activated by members of the Eastern PA QRP Club. This will be the first of many hikes this summer with our QRP radios and solar power. A group of us planning to hike the 220 miles of Appalachian Trail in PA over a few weekends. We will be staying overnight on the AT.

Len, N2BSC / Ed, WA3WSJ / Ron, WB3AAL will be hiking the northeast section of PA. This trip will start on Saturday morning around 9 AM. We could be on the air between 1 PM too 3 PM at the latest. No idea on how late any of us will be on the air. It could a late one if the bands are open. :-)

Will be on the air on Sunday morning but we might wrap it up by 9 AM. This is mostly due to the 15 mile hike ahead. We are not going to really set any kind of band plans but we will be on or around the QRP Frequencies. We are operating CW only. Ed is going to use his K1 and I am going to use my K2. Len plans on taking a 20 meter mono-band rig. Ed and Ron will be running from solar power charged batteries. We will both be carrying solar panels, hope it is sunny!!

If anyone from the list does work us, could you please post an e-mail telling everyone were we are on the bands. Also if someone could spot us on the DX cluster on the Web, we would like to work some DX from the AT.

Look at www.n3epa.org for information on the Appalachian Trail Award Program. Looking for some southern states for a Trail to Trail QSO.

72 & 73
Good DXing

Ron Polityka
de WB3AAL
wb3aal@fast.net

vvv Eastern Pennsylvania QRP Web Page vvv
<http://www.n3epa.org>

Eastern Pennsylvania QRP Club Call
N3EPA E-mail address: n3epa@fast.net

EPA QRP #1	ARRL Life Member
KL7 QRP # 309	G-QRP # 3031
ARCI QRP # 5318	10 - X #13173
NorCal	Zombie #625
ARS # 380	HI QRP #153
VA QRP Society #45	MI QRP #1703
K2 sn1392	NJ QRP #179

Date: Fri, 18 May 2001 11:57:57 +0000
From: "Steven Weber" <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [98422] NH AT Alert
Message-ID: <200105181630.f4IGUC415136@wolf.ncia.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

If the Wx clears as they say it will for tomorrow (Saturday), I plan on going out for an over night at Gentian Pond shelter, on the NH AT, near the Maine line.

I'll be trying out my new back packing station, operating on 40M, probably between 7.041 and 7.045. Power will be about 1 1/2 watts, to 1/4 wave ant sticking out the back of the rig and 1/4 wave counter pose on the ground. Look for me starting about 7 pm edt, then well into the evening.

I'll post another note tomorrow afternoon, with a go-no go status.

72,
Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Fri, 18 May 2001 11:57:56 +0000
From: "Steven Weber" <kd1jv@moose.ncia.net>
To: dsirait@centrin.net.id
Cc: qrp-l@lehigh.edu
Subject: [98423] Re: Help!! troubleshooting an locked electronic keyer
Message-ID: <200105181630.f4IGUL415204@wolf.ncia.net>
MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

> But lately I got into a problem the keyer starts to act strangely, I
> pinpoint it to the CD4093 which act as the clock generator and also as a
sidetone

Donny,

It sounds to me like there could be a "floating" input some where,
maybe on the 4093. All the gate input pins need to be connected to
something. An unused gate input left floating will be indeterminate,
causing the circuit to work or not, depending on whether it has to
float high or low to work.

4000 series CMOS logic chips are very robust. They're very hard to
damage, except if supply voltage is applied backwards to them.
Chances are good that all your 4093's are okay and it's just a
floating input that makes them act strange.

72,

Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Fri, 18 May 2001 09:58:36 -0700
From: "Dave Fifield" <ad6a@earthlink.net>
To: <kd1jv@moose.ncia.net>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>
Subject: [98424] Re: Help!! troubleshooting an locked electronic keyer
Message-ID: <001701c0dfbb\$cad97060\$0600a8c0@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Floating CMOS inputs can allow the gate/s on that
pin to oscillate at VHF/UHF frequencies inside the
chip. This can lead to thermal damage in some cases.
Like Steve says, tie all unused CMOS inputs to one
or other of the power supply rails (via a 10K resistor
is fine) and this problem won't occur.....but maybe
this isn't the problem....who knows?

Cheers,
Dave Fifield

AD6A

Date: Fri, 18 May 2001 18:04:42 +0100
From: "Tony Fishpool" <tony@g4wif.fsnet.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [98425] Re: Help!! troubleshooting an locked electronic keyer
Message-ID: <010601c0dfbc\$a8c1e920\$0dc5883e@LocalHost>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Donny is having web server problems at the moment so I have uploaded his
keyer circuit to :-

www.g4wif.fsnet.co.uk/keyer1.jpg
www.g4wif.fsnet.co.uk/keyer1a.jpg

It's in two halves due to limitations in Donny's drawing program.

Maybe the QRP-L brains trust can see what is causing his problem.

Kind regards
Tony - G4WIF

Date: Fri, 18 May 2001 10:14:31 -0700 (PDT)
From: Curt Milton <wb8yyy@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [98426] RE: Halogen Light Noise
Message-ID: <20010518171431.42483.qmail@web9603.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Yes these low voltage halogens are "great"
transmitters!

A few years ago we moved into a quiet, rural surburban
area. I was amazed when I put up the antennas that my
s-meter did not move with no signals present. Not too

many days latter my s-meter was at S6 on 20m! Yes it was the kitchen lites! And the track is sized to be a 20m dipole with 8 broadband noise sources feeding it since each low voltage halogen has its own DC/DC. I admit to missing the warm color of these lamps - but sometimes kitchen work needs to be done with someone using the radio.

I would hope that 120 volt halogens, if there is a such thing, would have no power conditioning. But make sure indeed its not a misnomer for halogen fixtures that run off a 120 volt supply!

In my case I bought "cheap" 120 volt normal light fixtures to replace the "nicer" halogens. But your neighbor may have different priorities! It might work to treat the track wires somehow with ferrites, etc. to break up the HF sized antenna it makes, but i doubt if this is easy! Unless this is a huge bath, i suspect the track is undersized as not very efficient at lower HF frequencies so your problem is not as bad as mine was, i hope.

curt wb8yyy

--- "Kevin Muenzler, WB5RUE" <wb5rue@arrl.net> wrote:
> Yes you are correct, these new low-voltage halogen
> lamps are a real
> problems. They do use a small switching supply.
> The 120v models aren't too
> much better if they have a dimmer built-in. They
> use the standard method of
> dimming by reducing the duty cycle of the AC by
> squaring off the wave form.
> They can cause noise too but not to the extent of
> the low-voltage models.
> If your neighbor doesn't need a dimmer the 120v
> lamps would cause no more
> noise than a standard light bulb. Problem is that
> most tracks aren't rated
> for 120v operation.
>
> 72/73
> Kevin, WB5RUE
>
> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of

> Steve McDonald
> Sent: Thursday, May 17, 2001 9:57 PM
> To: Low Power Amateur Radio Discussion
> Subject: Halogen Light Noise
>
>
>
> Has anyone experienced these monsters? My good
> neighbour has just put three
> of these miniature tracklights in his bathroom. It
> looks like they use a
> switching supply to develop 12 V as each light has
> its own 'module'. They
> are very noisy and generate all sorts of buzz and
> spurious signals
> especially in the LF band below 500 KHz. My question
> is...does anyone know
> if the 120 volt halogens (no power modules needed)
> are electrically silent
> (like a regular bulb). If that is the case I could
> replace the track for him
> and put in the quiet ones.
>
> Steve / VE7SL
>
>

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Date: Fri, 18 May 2001 23:19:54 +0700
From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [98427] Schematic diagram re: Locked electronic keyer
Message-ID: <004701c0dfb6\$62436600\$e2ee92ca@donnysirait>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dear Friends,
Some of you asked about the schematic diagram of the electronic
keyer.

Please find below the link to the schematic diagrams

www.geocities.com/yb1bod/Images/keyer1.jpg
www.geocities.com/yb1bod/Images/keyer1a.jpg

I have to put the schematic diagram into 2 connecting parts because my schematic drawing program cannot accept that much components
hi hi.

Thank you for your kind help I really appreciate it very much.

vy 72 de YB1BOD
Donny

Date: Fri, 18 May 2001 10:22:02 -0700 (PDT)
From: Curt Milton <wb8yyy@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [98428] Re: new Kenwood radio?
Message-ID: <20010518172202.58737.qmail@web9608.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Wild guess - Kenwood has nothing at the low end of the HF market - nothing like a TS-140 or their competitor's IC-718. So if I am right its a lucky guess. If so I hope it has lower phase noise and better control pots than my TS-140! But a low end radio would not be much an announcement amongst the Dayton crowd stay tuned i guess.

--- Mark Paley <mpaley@wcnet.org> wrote:
> I received an email from Kenwood today saying they
> would announce a new
> radio tonight at their party. Anyone have any ideas
> on what it is? Maybe a
> QRP rig? Naaah, it's probably another UHF or VHF
> handheld...
>
> 73 de
> Mark Paley--KF8KL--
> K1 #117, K2 #250 QRP-L #1899
> <http://wcnet.org/~mpaley>
>
>
>
>

>

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Date: Fri, 18 May 2001 09:40:15 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98429] Re: Improved 2N2222A?
Message-ID: <00d001c0dfa0\$14afc980\$6b01a8c0@INSYDENT>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> You could look at the 2N2219.
> I understand it is essentially the same chip, just in a metal can.
> That means you can heat sink it, and probably drive it a bit harder.
> 73, bob N6WG

Actually, I've seen plastic parts heat sinked. Probably not as effective
'internally' as a metal cased part, but it must help.

Mike

Date: Fri, 18 May 2001 16:28:12 US/Eastern
From: pwomble1@tampabay.rr.com
To: qrp-l@lehigh.edu
Cc: fpqrp-l@mpna.com
Subject: [98430] W8PIG to activate the original TT2 from FDIM
Message-ID: <200105182028.f4IKSC524084@smtp-server1.tampabay.rr.com>

Look for The Flying Pigs QRP Club, W8PIG, tonight around 9pm Eastern.

We will be using the original Tuna Tin 2 from FDIM.

Thanks to Ed W1RFI for the use of the TT2.

Pictures of the operation, plus MANY more FDIIM pics, can be seen at:

<http://www.fpqrp.com>

73

Paul

K4FB/8

Date: Fri, 18 May 2001 14:59:52 -0600
From: "Jerry McCollom" <w0mc@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98431] Re: new Kenwood radio?
Message-ID: <0E6grWhjudL31hXPCK700003b40@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, I was just tuned into the end of their webcast and the only relevant statement I heard about their announcement was a lady saying "...and I think everyone is impressed with our new HT". So I'd wager it's a new HT they announced :-)

72,

Jerry, W0MC
Fort Collins, CO

*** Superfest 2001 - <http://www.qsl.net/n0rc/hamfest/> ***

Date: Fri, 18 May 2001 21:04:47 +0100
From: "Chuck Adams, K7Q0" <k7qo@earthlink.net>
To: qrp-l@Lehigh.EDU
Subject: [98432] [MH101] VFO and rig layout
Message-ID: <5.0.2.1.0.20010518204825.00a8d9e0@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Saw the posting with respect to the VFO, but I did not see the original. Now I know that earthlink.net is losing about 50% of my email. Bummer. I seem to be getting only 1/2 of the QRP-L postings. Going to subscribe to the daily digest and compare the immediate vs. the digest list.

Someone must have posted that the layout and the schematic are flipped. That is the receiver is laid out on the "bottom half" or the portion of the PC board closest to what will be the front of the rig. The transmitter section is laid out on the back half. That is correct. A schematic is an electrical diagram only. It does not specify or need to be related to the layout. Schematics are usually laid out to show the logical signal flow in most cases and are usually read left to right, but I have laid out circuits right to left on Manhattan boards....

The reason for my layout.

I prefer the transmitter in the back as that is where the RF should be --- away from the receiver and close to the antenna jack. If you will note that in most rigs the PA section and PA filter is close to the antenna jack.

I also followed Dave Benson's, NN1G, schematic pretty closely and did not consider the possibility at the time of doing the rig Manhattan style.

The only thing that may be somewhat confusing to some new people is that the layout of the VFO does require some care in that the feed points for the receiver and transmitter sections are reversed, the coupling and bypass caps to those two sections may not be that obvious at first. It does take practice and patience to get it right.

Hope this clarifies some stuff.

I did not get my order from Mouser today, so I will come back later and post some more toroid stuff. And please please, TOROID is the correct spelling. Go to the blackboard and write it 100 times. There will be a quiz later. :-) ;-)

FYI

Chuck Adams, K7QO
Prescott, AZ

CP-60
k7qo@earthlink.net <http://www.qsl.net/k7qo>

TMPS-2001 Jan 12th -> April 15th, 2001 States = 49 DXCC = 15

States Needed AK DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6 EA8 EA7
PJ ZL2

Moving to Arizona? --- Bring your own water.

Date: Fri, 18 May 2001 17:11:50 -0400
From: "Ed Tanton" <n4xy@att.net>
To: "Boatanchors Reflector-Jack" <boatanchors@theporch.com>
Cc: "QRP-L Reflector" <qrp-l@Lehigh.EDU>, "Homebrew Reflector" <homebrew@qth.net>, "CW Reflector" <cw@qth.net>, "Boatanchors-Tempe" <BOATANCHORS@LISTSERV.TEMPE.GOV>
Subject: [98433] B&W GDO coils
Message-ID: <CKEGICNFDIMCEKEDCEHFGEJAHCAA.n4xy@att.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Someone was looking for a set of B&W 600 coils a week or two back. I have obtained a set extremely reasonably on ebay. If you will email me, I will be happy to pass along the bargain. Of course, keeping them isn't a problem either.

73 Ed Tanton N4XY <n4xy@arrl.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

R-390: Motorola SN: 374;
R-390-A: Capehart SN: 2241
51S-1 WE SN: 4389
HRO-50; HRO-60; & HRO-500
SP600-VLF SP600-JX-17 SP-600-JX-21

Date: Fri, 18 May 2001 13:09:09 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [98434] RE: Help!! troubleshooting an locked electronic keyer
Message-ID: <01C0DFBE.84101280.nkennedy@tcainternet.com>

Ah, a puzzle!

I wonder if C7 could be dumping too much charge into U2B on its discharge cycle? CMOS isn't generally thought of as being able to source or sink much current. I guess it may depend on the frequency of the U2B oscillator.

I was really looking for some kind of inadvertent voltage doubler with the diode/capacitor arrangement. I've seen that happen before but don't really see it here.

Also, is the failure independent of whether you are keying your rig?

72--Nick, WA5BDU

-----Original Message-----

From: Tony Fishpool [SMTP:tony@g4wif.fsnet.co.uk]
Sent: Friday, May 18, 2001 12:05 PM
To: Low Power Amateur Radio Discussion
Subject: Re: Help!! troubleshooting an locked electronic keyer

Donny is having web server problems at the moment so I have uploaded his keyer circuit to :-

www.g4wif.fsnet.co.uk/keyer1.jpg
www.g4wif.fsnet.co.uk/keyer1a.jpg

It's in two halves due to limitations in Donny's drawing program.

Maybe the QRP-L brains trust can see what is causing his problem.

Kind regards
Tony - G4WIF

Date: Fri, 18 May 2001 18:38:28 -0400

From: wb2vuo@juno.com
To: adamvaz@mobile.att.net, qrp-l@lehigh.edu
Subject: [98435] Re: Wanted: Hy-Gain 3806 Battery Tray
Message-ID: <20010518.183830.-284705.0.wb2vuo@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Adam (and the List). Keith again here in the Depths of the Great Bergen Swamp

>Most of those radios of that period use shrinked-wrap NiCad packs or
>conventional battery holders. Is the internal power connector the same
>used for 9v batteryys? Dead giveaway.
>Adam

Not the case here. The Hy-Gain has a battery tray that makes up the bottom half of the HT's front. It is about 3 1/2" x 4" x 3/4" and holds 8 "AA" batteries in 4 double rows. The spring contacts are offset from center and are spaced about 2 3/4"

If I had replacement tray I would hot-glue a set of 1300 - 1600 mAh NiMH batteries in there and wire up the battery charge jack to match. This would allow for 10 - 15 hours of operation on a full charge, maybe more.

I may have to wait for the next semi-local hamfest as I won't make the big one in Rochester this year (again)

72/73, Keith, WB2VUO, 100% QRP from the Depths of the Great Bergen Swamp
President, Brockport Amateur Radio Klub & Tech Coordinator, ARRL WNY
Section
My night light runs more power than my Rig!!!
Replies - <mailto:wb2vuo@arrl.net>

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